

App. F. IX-4

Previous References

1935.6
Geol

File No. 38-35

Serial Nos. 1-2

Letter References.

Geol 13-36 (1-2)

P+S. 101-38-1. 49-37 (1-2)

(14)

GENERAL AND REVENUE SECRETARIAT.

Serial Nos.

Two

Part B for Jan.

SUBJECT.

Programme of work of the Geological
Department for the immediate future
and a location of proposed Constitution of
Charges among the existing staff

2269-71 of 19.11.35

to Dir - of Geol.

WD 03607-GPB-22,500-2-8-35

in compliance to govt the
financial rest of the

A Review of the

14

Serial
No.

1

From the Director of Geology
No. R. Dis 42/34-35 dated 16/9/35

Submits, for favour of consideration and approval of Govt, a brief note outlining the programme of work given depl't for the immediate future and the allocation of the proposed constitution of changes among the existing executive staff.

1. Subd. The work to be carried on in the division is divided broadly into ^{three} ~~four~~ heads.

(1) Geological Survey -

(a) Re-examination of specific areas in the light of recent researches.

(b) Publication of pamphlets -

(c) Special bulletins.

(2) Mineral Survey.

(a) Metalliferous minerals

(b) Building stones & refractory materials

(c) Ceramic materials & minor minerals.

(3) Chemical Section

2. He has also proposed the allocation of work on the above lines among the existing staff.

1346

File No. 38

of 1935.

General and Revenue
Secretariat

and submitted
has been also submitted details of
programme to be carried out during the
year 1936.

Subd for order.
May be approved.
Dev. Secy)

Dec
26/9/35

May perhaps be discussed with
the Director after the Director's return
to Bangalore
First Meeting

MW
30.9.35

5-10
27/10
MW
3.10
Dec

Revised min ref to para 4 above

Date & hour for the meeting
have to be fixed.

15/10
15/10
KW

Dev Secy

KW
16/10

1st Member

Dec
16/10/35

may be submitted after the 21st

16/10
MW
17.10

Revised min ref to the members of minute above

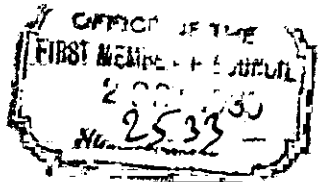
21/10
KW

2nd Member

Dec
21/10/35

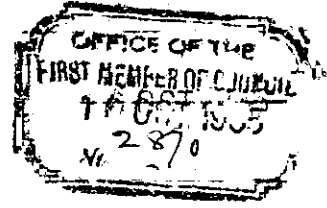
The Dy Director may be requested
to meet us to discuss this programme
on the 29th (Tuesday) at 3 PM

Issue D.O.
put up Dec 24/10/35



1927
26/9

By B. K. L.
15-10-1935
By Secy. SECRETARY
3/10/35
DEVELOPMENT BRANCH



OFFICE OF THE
SECOND MEMBER OF COUNCIL
2 OCT 1935
No. 2980

MW
23/10/35
24.10.35

Serial
No.

Order No. D. 2685

24/10/35

order

The Director of Geology
to meet the 2nd
Member of Council
at 8 P.M. on the
29th October 1935.

The question was discussed and
it was decided that the scheme might
generally apply. It being understood that the
specifically mentioned will be main when
necessary for in regard to personal expenditure
etc.

MW.
24.10.35

Draft
29/10/35

Sold into a draft-f.o. for consideration.

If approved only the portions in brackets
will be typed. Pages 3, 4, 5, 7, 8, 9, 10, 11 to 20.

(Dev. Secy)

2/11/35

For approval

Secretariat

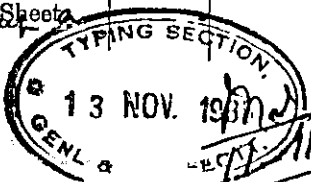
MW.
4.11.

Maybe subd to Dewan for
approval

5/11/35

MW.
5.11.35

WD 03594-GPB-30,000-13-7-35



Typing Section W.C.
to Secy. Genl. Secy.
6/11/35

min. typed G.O.
subd into a letter copy

MW.
12.11.35
Dewan
12/11/35

OFFICE OF THE
SECOND MEMBER OF COUNCIL.

NOV 1935

NO 3386

2

26/5
2/11

1935
G.T.

1A

1341

File No.

of 193

General and Revenue
Secretariat

H Can 842

oft and fair sub

H Secy has not been consulted

sur
19/11

Communication in this case, though
the de: septt does not appear necessary

WS
19/11

H Secy)

19/11

G.O. No 2265-71 dated 19/11/35 ~~personally~~

Appointing the proposed ~~subject~~ in usual subject
to ~~an~~ sanction being obtained in respect of
expenditure personnel etc

B
6/1

Geo 16/9

GOVERNMENT OF MYSORE.

1
Geol 38-35-1

Telegraphic Address:—"GEOL."

MYSORE GEOLOGICAL DEPARTMENT,

No. R. Dio 42/34-35. Inc. 1.

Bangalore, 16th September 1935.

FROM

B. RAMA RAO, Esq., M.A., D.I.C., F.G.S.,
Offg. Director of Geology in Mysore,
Bangalore.

TO

M. Venkatanaranappa, Esq., B.A.,
Secretary to the Government of
His Highness the Maharaja of Mysore,
Development Department, B a n g a l o r e.

I have the honour to submit herewith for favour of consideration and approval of Government a brief note outlining the programme of work of the Department for the immediate future and the allocation of the proposed constitution of charges among the existing executive staff. It might become necessary in the near future, as our investigations multiply, to split up these sections into a larger number of independent units, to give effect to which and to initiate other lines of activities, the Department will have to be suitably equipped and re-organised.

P.T.O.

GEN. & REV. SECRETARY
1341
16/9
DEVELOPMENT BRANCH

If the suggested scheme of programme results in any quick and noticeable improvement of the standard of work of the department, I will submit in due course separate proposals for a suitable re-organisation of the Department.

I have the honour to be,

Sir,

Your most obedient servant,

B. Ramo Rao

Offg. Director,

Mysore Geological Department.

Bs.16/9



✓

P R O G R A M M E.

A note broadly outlining the future programme of work of the Department was submitted to Government on 5th September 1934. Since then the Government have been pleased to favourably consider part of the proposals submitted and have sanctioned the entertainment of two temporary field Assistants for a period of one year. Though this much needed addition will help us to some extent to widen our sphere of work, yet as the new recruits have to gain practical experience regarding the work of the department, it will be some time before they can be left in any independent charge. Leaving them aside for the present, the Department has the following cadre of the executive staff:

- may refer
to notes
- 1 Director.
 - 2 Assistant Geologists.
 - 2 Sub-Assistant Geologists.
 -
 - 5
 -

✓ With this limited staff it will not be possible to take up just at present all the various lines of work which had been planned out in the previous note. Considering all the circumstances I think it is desirable to limit our programme of work for the immediate future to the following and expand our activities gradually if consid conditions improve and pave the way for a suitable re-organisation of the Department.

3

- [1. Geological Survey:- (a) Re-examination of specific areas in the light of our recent researches to bring up to date the existing geological map of Mysore (published in 1915) and to collect the needed information for the compilation of an authoritative handbook on the Geological History of Mysore.

To be kept.

4 (b) Publications of popular descriptive pamphlets on the Geological features of the following places of interest in the State.

- (1) The K.R.S. Reservoir.
- (2) The Vanivilas Reservoir.
- (3) Sri Chamarajendra Reservoir.
- (4) The Jog Falls.
- (5) The Sivasamudram Falls.
- (6) The Biligiri Rangan hills.
- (7) The Gopalaswamy hills.
- (8) The Chamundi hills.
- (9) The Kabbaldurga Range.
- (10) The Bababudan Range.
- (11) The Nandydrug Hills.
- (12) The Environments of Bangalore.
- (13) The Kolar Gold Field.
- (14) Bhadravati Area.
- (15) Mandya Area.

To be typed

3- (c) Special Bulletins descriptive of the detailed investigations to be conducted on:

- (1) The Kolar Schist belt.
- (2) The Chitaldrug Schist belt.
- (3) The Shimoga Schist belt.
- (4) The Bababudan Tarikere belt.
- (5) The Closepet-Tumkur range of Granites.
- (6) The Arsikere-Banavar Granites.
- (7) The Bangalore Gneissic Complex.
- (8) The Charnockites of Mysore.
- (9) The Laterites.

6 11. Mineral Survey:- For the development of the mineral resources of any country it is primarily essential to have precise and reliable information on various aspects of the mineral deposits which the country may possess. It is the duty of a technical organisation like ours, to collect all possible information regarding the available mineral resources, to investigate the ways and means of making use of them to the best advantage of the country and to educate the public by disseminating the collected data by popular and authoritative pamphlets, to take an active interest in the development of the mineral resources the country possesses. A certain amount of useful work has been done in this line, but very much remains yet to be done. The inadequate cadre of this department, necessitating the constant shifting of the few officers from one line of work to another has not allowed till now an opportunity to any of the officers to concentrate their attention and gain an expert knowledge on the various aspects of any specific group of minerals.

II Mineral Survey

To be kept

Therefore I propose now, having in view of our future needs, [To group our known mineral deposits into the following sections and place each section in charge of an officer, to give him ample scope to study everything connected with the group of minerals under his charge and initiate schemes for their development.

§ The proposed sections will be as under:-

- | | |
|--|---|
| (a) Metalliferous Minerals. | Chromite, Manganese and Sulphide minerals. |
| (b) Building stones & Refractory materials:- | Building stones, Limestone, Magnesite, Asbestos and Mica. |
| (c) (i) Ceramic materials:- | Clay, Kaolin, Bauxite, Ochres &c. |
| (ii) Minor minerals. | Kyanite, Sillimanite, Garnet, Corundum, Graphite. |

9 Officers placed in charge of these divisions will start immediately intensive investigations on the minerals compassed within their division, and collect precise information on every one of the known deposits regarding its available quantity as proved by actual boring tests, its grade and the particular uses to which it could be put, the extent of demand for cleaned raw mineral locally and abroad and the local possibilities of converting such raw minerals into finished products.] The experiments regarding the preparation of finished products require the assistance of a trained metallurgical chemist and it will become necessary in the near future to have such a qualified hand on the regular staff of the Department.

10 [III. Chemical Section:- The time of both the chemists will be fully engaged in conducting the analyses of specimens which will be submitted to them from these various ^{Sections} ~~divisions~~ and from the public.] It will be desirable to recruit a new hand to conduct the routine analyses and set free some time of the chemists to enable them to devote their attention for experimental investigations.

11 [The allocation of work on the above lines among the existing staff will be as follows:-

<u>Name.</u>	<u>Designation.</u>	<u>C h a r g e.</u>
Mr.B. Rama Rao.	Ag. Director.	Administration, General supervision, Geological survey, and publications, Hydrographic, Engineering and Economic enquiries. ✓
Mr. V.T.Venugopal.	Asst. Geologist.	Byrapur Chrome mines, Chromite, manganese and sulphide minerals, inspection of Mining & Prospecting blocks. ✓
Mr. S.Lakshmana Rao.	Ag. Asst. Geologist.	Building stones, limestone, Magnesite, Asbestos and Mica.

(continued on next page)

14 11. Mineral Survey:- (A). Metalliferous mineral section
Mr. V.T. Venugopal will start a detailed investigation of the more important groups of our manganese ore deposits with a view to test the possibility of their subsequent development. He will also collect the needed information regarding the exact quantities and the grades of the collected ores left over in the mining blocks of the relinquished leases and take suitable steps to effect their sale. This will be in addition to his work of superintending the Byrapur Chrome mines, and the annual inspection of the mining and prospecting blocks.

15 (B) Building stones and Refractory material section:-

Mr. S. Lakshmana Rao assisted by Mr. K. Khader Mohideen will investigate the slatey schists of the Hiriya-Aimangala Area as to the possibility of using them as paving slabs, and also open out the Fuchsite quartzites of Bikonhalli (Shimoga taluk) and Kyatanhalli porphyries near French Rocks, to ascertain if ^{They} ~~that~~ could be turned out into ornamental stoneware. He will make a detailed survey of the available magnesite deposits ^{of the state} and start investigations on the Mavinhalli deposits as to their suitability for ~~some~~ cement etc.

16 (C) Ceramic Materials Section:-

Mr. T.P. Krishnachar assisted by Mr. Venkataramana Setty will continue his investigations on the Clay deposits in the vicinity of Bangalore in connection with the development of stoneware pipe industry.

Mr. Krishnachar will survey in addition the Kyanite Sillimanite deposits of the Mysore district and investigate the possibility of effecting concentration of these useful minerals.

(continued)

Mr. T.P. Krishnachar.	Sub-Assistant Geologist.	(a) Clay, Kaolin, Bauxite, Ochres &c. (b) Kyanite, Sillimanite, Graphite, Corundum and Garnet.
Mr. M.B. Ramachandra Rao.	Ag. Sub-Asst. Geologist.	Museum, Exhibition, and Technical assistance to the Director in Geological Survey, Hydrographic and Engineering enquiries &c.
Mr. K. Khader Mohideen.	Temp. Field Assistant.	For the present will assist Mr. S. Lakshmana Rao in the investigation on Building stones, Mining of Kaolin.
Mr. A.K. Venkatramana Setty.	Do.	Will assist Mr. T.P. Krishnachar in the investigation of clays for ceramic and stoneware industries and quartz sands for purposes of glass manufacture.

Mr. M. R. Anantanarayana Iyer.	Chemist.	Chemical Analysis
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Mr. E. R. Tirumalachar.	Chemist.
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To be typed
12 The details of programme to be carried out for each year among the several sections will be submitted to Government for approval at the beginning of that calendar year.

13 The programme of work for 1936 is proposed to be as follows:-

1. Geological Survey:- During the year we expect to investigate and collect the necessary material for the publication of, the

(a) popular pamphlets on

(1) Krishnaraja Sagara Reservoir area

(2) Chamundi Hills.

and (b) detailed petrographic Bulletins on

(1) The Chitaldrug Schist Belt.

(2) The Kolar Schist belt.

(3) The Laterites of Kolar District.

17 (D) Museum & Exhibition Section:- Mr. M.B. Ramachandra Rao will take up the classification and arrangement of the type specimens of rocks in conformity with modern petrographic nomenclature and start preparing a descriptive catalogue for the museum. ^{Specimens.} He will continue his investigations on the Laterite deposits of the Kolar District.

18 Models illustrating the formation of alluvial gold and the sub-artesian conditions of water supply etc. are being got done for the ^{forth-} coming exhibition. For the next year he will look after the designing and execution of suitable models illustrative of other aspects of ^{underground} water flowage, mode of formation of mineral deposits etc. The execution of these models will be done by our ^draftsmen in addition to their routine work of the preparation of the geological maps and sections, Charts and other drawing work.

19 The two temporary field Assistants in addition to helping the two Senior officers in their investigations on Building stones and Ceramic materials, will ^{take up when needed} conduct mining of kaolin, quartz and felspar which will be required for the porcelain factory.

20 III. Chemical Section:- Detailed investigations regarding the conversion of our available raw mineral resources into their several forms of finished products belong naturally to the sphere of metallurgical chemists, but such of the preliminary investigations as could be carried on with the available appliances of our chemical Laboratory will be done by the Chemists in addition to their routine analytical work. If time permits the following investigations are proposed to be taken up for the next year:—

8

(a) Investigation on the quantity of the pure mineral present in the different grades of the chrome ores of the State and their behaviour with various reducing agents under heat.

(b) Rational analyses and the ultimate composition of clays and their particle size and the correlation of these with their physical and chemical properties.]

B. K. Ram Rao

Offg. Director,

Mysore Geological Department.

Geol 38-35-2

Read :-

Letter No. R.Lis.42/34-35 dated 16th September 1935 from the Director of Geology submitting for consideration and approval, a scheme outlining the programme of work of the Geological Department for the immediate future and the allocation of the proposed constitution of charges among the existing executive staff.

Order No. D. 326971/ Geol 38-35-2

Dated, Bangalore, the 19-11-35.

Government are pleased to accord their general approval to the scheme submitted by the Director with the letter read above. But specific sanction should be obtained whenever necessary in regard to ^{the personnel, the} expenditure to be ^{personnel} incurred, ~~personnel~~ and other questions.

21/11/35
Secretary to Government,
& Development Department.

To

The Director of Geology
The Comptroller to Govt. through
Financial Department.
The Director of I & C.
The Heads of other Departments
The Deputy Commissioners of Dist.

PROCEEDINGS OF THE GOVERNMENT OF HIS HIGHNESS
THE MAHARAJA OF MYSORE.

+10:

Read :-

Letter No. H. Dis. 42/34-35 dated the 16th September 1935 from the Director of Geology in Mysore submitting for consideration and approval, a scheme outlining the Programme of work of the Geological Department for the immediate future and the allocation of the proposed constitution of changes among the existing executive staff.

Order No. D. 3269-71 / Sol. 38-35-2

Dated, Bangalore, 18th November 1935.

Government are pleased to accord their general approval to the scheme submitted by the Director with the letter read above. But specific sanction should be obtained whenever necessary in regard to the personnel the expenditure to be incurred and other questions.

Acubbarayappa
Secretary to Government,
Development Department
a

To

The Director of Geology in Mysore,

The Comptroller to Government
~~through Financial Secretary,~~

The Director of Industries and Commerce in Mysore

P.H.